Year 1
Direct Support Professional Training

Student's Resource Guide

Session #3
Wellness:
Nutrition, Exercise and Safety

California Department of Education
and the
Regional Occupational Centers and Programs
in partnership with the
Department of Developmental Services

1999

List of Class Sessions

Session	Topic	Time
1	Introduction, Overview of Developmental Disabilities, Values, Diversity	2 hours
2	Communication	3 hours
3	**Wellness: Nutrition, Exercise and Safety**	**3 hours**
4	Wellness: Medications	3 hours
5	Wellness: Responding to Individual Needs	3 hours
6	Positive Behavior Support	3 hours
7	Teaching Strategies: Relationships, Task Analysis and Prompts	3 hours
8	Teaching Strategies: Positive Feedback and Natural Times to Teach	3 hours
9	Daily Living	3 hours
10	Individual Rights, Laws and Regulations	3 hours
11	Leisure and Recreation	3 hours
12	Competency Test	3 hours
	Total Class Sessions	**12**
	Total Class Time	**35 hours**

Key Words

In this session, the key words are:

- Nutrition and Hydration
- Movement, Exercise, and Physical Fitness
- Infection Control
- Hand-Washing (thorough and frequent)
- Standard Precautions
- Safety (around the house)
- Lifting (helping with transfers)
- Environmental Emergencies

Cautionary Statement

The material in this module is **not intended to be medical advice** on personal health matters. Medical advice should be obtained from a licensed physician. This module highlights several nutrition, exercise and safety measures. We urge you to talk with nurses, dietitians, and other professionals (for example, disaster experts; occupational therapists; sports physiologists) to broaden your understanding of the fundamentals covered in this module.

Your In-Class Review Notes

This is a place for you to take notes on the review questions during this session.

1. **What is good nutrition and why is it important?**

2. **What changes can most Americans make in their drinking and eating habits to improve their health and well-being?**

3. **What is the proper way to handle, prepare, and store food?**

4. **What are some of the positive effects of movement and physical activity?**

5. How are infections spread, and what can you do to limit their spread?

6. Can you describe at least three principles of good body mechanics when lifting things?

7. Why is preparation, planning, and practice important in dealing with possible environmental emergencies (for example, fires, earthquakes)?

Information Brief

Health, Wellness, and Safety

This session, and the next two, focus on health, wellness, and safety. *Health* is not just the absence of disease, it is being in the *best possible health* -- physically, mentally, emotionally, spiritually. Good nutrition is one element of a healthy lifestyle. Other elements include physical activity, avoiding smoke and other toxic substances (for example, too much alcohol), management of stress, and early detection and treatment of health problems. *Wellness* is about habits that maintain good health, such as hand-washing, eating properly and getting plenty of exercise and good personal hygiene. *Safety* is about avoiding hazards of being injured. Certain practices (for example, locking up toxic substances; proper body mechanics when lifting) increase safety by reducing the risk of being injured.

The content of the three *Wellness* modules is as follows:

- **Wellness, Part One (Nutrition, Exercise, and Safety)** Food and nutrition, adequate fluid intake (hydration), movement and exercise (physical fitness), infection control, standard precautions, safe practices (for example, lifting techniques), assuring a safe environment, and dealing with environmental emergencies.

- **Wellness, Part Two (Medications)** Administration of medications and documentation, uses and side effects of common medications, pharmaceutical symbols and abbreviations, correctly storing/ recording and destroying medicines, side effects and interactions (for example, with other medications or alcohol) and responding appropriately.

- **Wellness, Part Three (Responding Individual Health Care Need)** Personal hygiene, health history, scheduling routine medical and dental exams, recognizing and advocating for age/gender health screenings, using community resources, working effectively with health care professionals (for example, preparation, advocacy, documentation, follow-up), recognizing signs and symptoms of illness or injury, and handling medical emergencies.

Some overlap is unavoidable, and is helpful in emphasizing certain fundamentals (or basics). Here are a couple of illustrations:

1. Attention is paid to signs and symptoms of infection in Part One. Part Two considers intended (and unintended) effects of medications. Detecting signs and symptoms, illness and/or injury in general, is taken up in Part Three.

2. Some people are allergic to certain foods (for example, shell fish, dairy products), and in some rare instances the allergic reaction is a threat to life itself. Such rare occurrences constitute medical emergencies, a topic considered in Part Three. Restrictions in response to food allergies are discussed in Part One.

Information Brief

Some Food and Nutrition Basics

Why is Nutrition Important?

We are what we eat! Good nutrition helps keep us healthy. Poor nutrition can shorten our lives, and make our lives less fulfilling.

- Coronary heart disease is the most common cause of death: more than 500,000 each year, and poor diets contribute to these deaths.
- Hypertension (high blood pressure) affects nearly 58 million Americans, contributes to stroke and heart disease, and is linked, in part, to diet.
- Cancer is the second most common cause of death in the United States, killing about 475,000 people per year. High-fat, low fiber diets increase the risk of certain cancers occurring.
- Obesity affects about 30% of American adults and about 50% of adults with developmental disabilities. Obesity contributes to heart disease, hypertension, diabetes, and other health conditions. Diabetes affects approximately 11 million Americans, contributes to heart, kidney, eye, and circulatory problems.
- Osteoporosis affects 15 to 20 million Americans, especially women beyond menopause. Osteoporosis contributes to 1.3 million bone fractures a year in those over 45 years of age. Eating foods rich in calcium, and staying active, can reduce bone loss.
- Dental disease (caries, and periodontal disease especially) is related, in part, to diet (for example, excess sugar lingering in the mouth) and whether the water is fluoridated.

Individual Needs, Preferences, and Restrictions

Water and other fluids

Water is fundamentally important to life. Water regulates many processes (body temperature; waste removal), and carries minerals. Most people should drink eight 8-ounce glasses of water a day, or its equivalent. Water, itself, has no calories (units of energy); many sodas and juices contain added sugar; and caffeine is dehydrating. Hence, if you drink lots of coffee, cola (even diet), and other such liquids, you need to take in more water than average. Indeed, some would say that caffeine drinks should not be counted toward the 64 ounces of fluid needed daily.

Nutrients and other food components

We need nutrients (for example, protein, carbohydrates, fat, vitamins, minerals) and other food components (for example, fiber) in proper quantity, given our size, activity level, and the rate at which our bodies use energy. Let's look at these nutrients.

Carbohydrates. – Carbohydrates are categorized as follows:

- *Complex carbohydrates* are fiber and starches. These are found in large amounts in vegetables, whole grains, peas, and beans.

- *Simple carbohydrates* are simple sugars (fructose, sucrose, etc.). Sugars are especially plentiful in fruits. Without processing, these sugars contain vitamins and minerals. Granulated or powdered sugar, on the other hand, has been crystallized (from sugar cane or sugar beets) and essentially stripped of vitamins and minerals.

- *Dietary fiber* (a type of carbohydrate, sometimes referred to as "roughage") comes from plants, especially fruits, vegetables, whole grain breads and cereals, brown rice, legumes and beans.

Except for fiber (the non-digestible carbohydrate), both simple and complex carbohydrates are converted into glucose, which directly provides energy for the body, or is stored for future use. Carbohydrates are the main source of blood glucose, a major fuel for all cells, and the only source of energy for the brain and red blood cells. Many Americans ingest way too much sugar (in soda and candy especially), and not enough of other plant foods rich in complex carbohydrates. Dietary fiber performs several critical functions. It promotes a feeling of fullness; it prevents constipation, hemorrhoids, and other intestinal problems; it helps lower blood cholesterol, thereby reducing the risk of heart disease. Many Americans do not have enough fiber in their diets.

Protein. – Foods rich in protein include milk, eggs, cheese, fish, meat, and poultry. Other good sources of protein are whole grains, nuts, beans, and peas. Protein is essential for growth and development. Besides energy, protein contributes to the production of hormones, antibodies, enzymes, and muscle tissue. It also helps maintain the proper acid-alkali balance in the body.

Fat and Cholesterol. Fat provides energy, is essential for growth and development, and helps maintain healthy skin, hair, and nails. Fat also makes things taste good. Fats are categorized as follows:

- *Saturated fat* comes from animal foods, palm and coconut oil
- *Polyunsaturated fat* comes from vegetables oils such as corn, sunflower, safflower, and soybean.
- *Monounsaturated fat* comes mainly from oils such as olive, peanut, and canola

Cholesterol is a white, waxy, fatty substance found in all food from animal sources. Cholesterol helps build cell membranes, produce hormones, and manufacture bile acids. Our liver is capable of producing all the cholesterol our bodies need. Hence, there is no need to obtain cholesterol from the fat in animal foods.

Sodium. – Sodium (salt), in small amounts, is an important nutrient. It helps regulate body fluids, helps muscles function properly, and supports the blood and lymph systems. Too much sodium in the diet can result in high blood pressure, and aggravate many medical problems, including PMS (premenstrual syndrome), heart and kidney disorders.

Other vitamins and minerals. – Calcium, iron, folic acid, magnesium, zinc, potassium, and other elements are essential in small amounts. In developed countries, it is rare to encounter vitamin deficiency diseases like *scurvy* (Vitamin C deficiency); *blindness* (Vitamin A); *beriberi* partial paralysis (Vitamin B1); *pellagra* and its symptoms dermatitis, diarrhea, and dementia (Vitamin B3), and *rickets* (Vitamin D). The eight B vitamins and Vitamin C are water-soluble and not stored in the body. Vitamins A, D, E, and K are fat-soluble and stored in the body. Each has a recommended daily requirement, which for most people indicates how much of each vitamin needs to be in the diet. Excessive heat, freezing, light, air, and cooking in water can reduce vitamins and minerals from food. Smoking, alcohol, laxatives, diuretics, antacids, antihistamines, and other things we use can affect absorption of vitamins and minerals. Thus, it is a good idea to consult with each individual's physician as to whether any dietary supplements are indicated. If so, they should be part of a physician's treatment order, and documented.

Different kinds of diets

There are three kinds of diets:

- *Regular diet.* – This is the typical diet of most individuals, with no texture modifications and nothing added (or subtracted) because of health needs and conditions.
- *Modified diet.* – This is a diet altered in texture. At one extreme, the food may be *pureed.* At the other, some foods (for example, steaks, roasts, carrots) may be cut into small bite sizes to facilitate chewing and swallowing. If a person has trouble chewing and swallowing (for example, due to cerebral palsy,

absence of teeth, or some other condition), a *modified diet* may be ordered by the physician or other health care professional (for example, nurse practitioner or dietitian).

- *Therapeutic diet.* – Developed to contain certain elements that contribute to good health, and to avoid elements that are problematic because of an underlying health condition.

Another example of a therapeutic diet is the diabetic diet. In the diabetic diet the emphasis is on nutrition and good eating habits. People with diabetes need to avoid excess blood sugar. Actual diets go well beyond the "principles," with careful weighing of food using ounce scales, because serving sizes are fundamentally important in controlling diabetes. While essential for diabetics, avoiding too much sugar is a good idea for nearly everyone. People with (and without) diabetes would be well served by following the practices outlined in the "Principles," below: (1) not skipping meals; (2) avoiding too much fat; (3) controlling portion sizes (if overweight); (4) distributing foods evenly throughout the day; and (5) increasing daily exercise, subject to the doctor's approval.

Principles of the Diabetic Diet

Purpose: (1) nutritionally complete diet; (2) control blood sugar and minimize spilling of sugar into the urine; (3) prevent or delay complications.

Omit Sugar and Concentrated Sugar: Minimize sugar, honey, molasses, jams, jellies, pies, cakes, donuts, cookies, candy, soft drinks and other foods high in sugar. When reading labels, watch for: corn syrup, dextrose, sucrose and fructose. These are other names for sugar and should not appear as the first or second ingredient. Limit fruit or fruit juices to one small serving with meals. Artificial sweeteners such as saccharin (Sweet 'n Low, Sugar Twin) and Nutrasweet (Equal) are allowed.

Weight Control: Minimize high fat foods, such as fried foods and those in gravies and sauces. Increase daily exercise with your doctor's approval.

Eat 3 Balanced Meals: Include some protein foods (milk, meat, beans, eggs, lowfat cheeses) and some carbohydrate food (bread, cereals, rice, potatoes, noodles, fruits and vegetables) at each meal. Distribute foods evenly throughout the day. Avoid alcohol.

Meal Regularity: Eat meals at regular, set times. Don't skip meals. Space meals approximately 4-5 hours apart. Get in the habit of carrying a snack in case too much time lapses between meals.

Source: Kaiser Permanente (1998)

Calories

A *calorie* is a unit of energy. Here are two key points about calories:

- Carbohydrates and protein provide 4 calories per gram. (There are 115 grams in an ounce.) Fat, on the other hand, contains 9 calories per gram.

- If one takes in more calories than are used, the excess will be transformed into body fat.

In other words, gram-for-gram, fat has many more calories (or much more energy) than protein or carbohydrates. Thus, when people want (or need) to lose weight, they are typically advised to cut down on fatty foods. Avoiding heart disease is another reason.

Here are some "rough and ready" estimates of daily caloric need:

1,600 calories – many sedentary women and some older adults;

2,200 calories – most children, teenage girls, active women, and many sedentary men; and

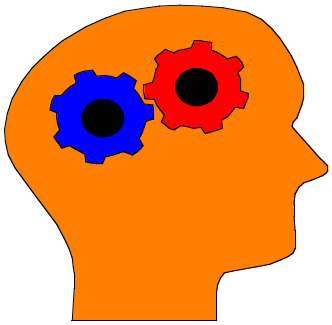
2,800 calories – many teenage boys and active men, some very active women.

Food labels, as we shall see shortly, express desired minimums and maximums based on a 2,000 calorie diet.

Food preferences, aversions, and restrictions

Preferences and aversions. — Most people have food *preferences*, and a few food aversions. Some are related to what each person ate while growing up. Here are just a few examples. Most people *like* foods that are sweet (for example, ice cream) or that have been cooked in fat (for example, French fries). French fries are vegetable, but more than one-half the calories in the typical serving are from fat. Cultural and religious traditions can be important, so it pays to ask and not to make assumptions about what someone wants to eat (or avoid eating). Typically, the DSP can respond sensibly to *preferences,* unless whole classes of important food (for example, vegetables; fruit; legumes; whole grains) are ruled out. In that case, we suggest getting advice from the person's physician and others (for example, dietitian, behavior specialist).

Restrictions are often in response to food allergies (or sensitivities). Food allergies (or sensitivities) become evident because of the body's reaction to food. Hives, itchy watery eyes, diarrhea, mucous build-up, and other responses are fairly common. A rare occurrence is *anaphylactic (septic) shock*, which is life threatening. Breathing can stop without immediate medical intervention. When a "food allergy" or sensitivity is suspected, the DSP should be careful to keep the person away from such foods, and the individual should see his/her physician.



Information Brief

Meal Planning and the Food Guide Pyramid

Over the years, the U.S. Department of Agriculture has emphasized the importance of a "well-balanced diet," but the meaning has changed as more has been learned about the relationship between food, nutrition, and good health. Meal planning is important, because it helps assure a balanced, nutritious diet, while attending to cost, attractiveness (taste and appearance), and ease of preparation. **Menus are the plan for good nutrition.** Menus make food shopping go more smoothly. Over half of all grocery shoppers use a list. Lists can be constructed from menus.

In 1996, the U.S. Department of Agriculture changed it's dietary recommendations, replacing the old system with the Food Pyramid Guide. In your packet is a copy of the Guide, courtesy of Kaiser Permanente.

Food Categories

The Food Pyramid Guide uses five (six, if "fats, oils, and sweets" are included), rather than the earlier four categories (with recommended servings in parenthesis), as follows:

- **Milk, Yogurt, and Cheese Group** (2-3 servings)
- **Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group** (2-3 servings)
- **Vegetable Group** (3-5 servings)
- **Fruit Group** (2-4 servings)
- **Bread, Cereal, Rice, and Pasta Group** (6-11 servings)

For example, a person who needs only 1600 calories per day would reduce the size of each serving, or take in a number of servings toward the lower end of the range (for example, 6, 7, or 8 servings from the Bread, Cereal, Rice, and Pasta Group rather than 9, 10, or 11).

Serving Sizes

Food package labels show serving sizes, so that calculations can be made. Dietitians typically use serving sizes along these lines:

- 2-3 oz. of meat, poultry, or fish, which is about as much as will fit into your cupped hand, or two or three slices of packaged meat, or a drumstick or thigh;

- 1 cup (or 8 fluid ounces) of milk or yogurt;
- 1 cup of raw, leafy vegetables or of cooked dry beans;
- 2 eggs;
- 4 Tbsp. Of peanut butter;
- 1/2 cup of cooked or chopped raw vegetables;
- 3/4 cup of vegetable or fruit juice;
- 1 piece of fruit (for example, medium apple, orange, banana);
- 1 slice of bread or 1 tortilla;
- 1 oz. of ready-to-eat cereal;
- 1/2 cup cooked cereal, rice, or pasta; and
- 1/2 bagel or 4-6 crackers.

Food Service: Some General Considerations

Here are some basics to consider in deciding about food service:

- What contributes to good nutrition?
- What is tasty and attractive?
- Who likes to cook? Are they good at it?
- What is the emphasis on planning, participation, and training among individuals living in the home?
- How much time is available?
- What equipment is available?
- How much do we want to spend on food?
- How can food be prepared and kept safe?
- What does Community Care Licensing require?

Involving residents in food service makes good sense, in most instances. Enjoyment of food is universal, and many people take great interest in planning, shopping for and preparing meals. Individuals should be encouraged to participate in meal planning and preparation.

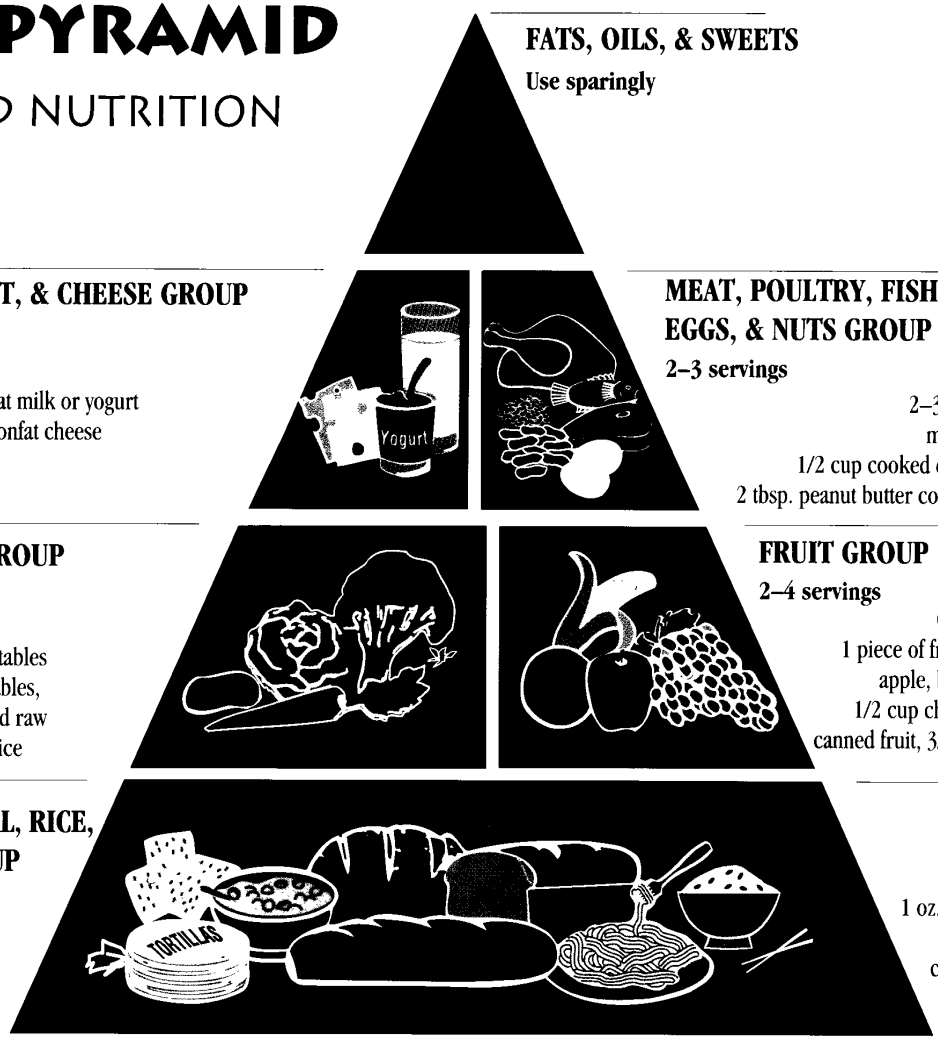
Some Community Care Licensing Requirements

Here are some general, Community Care Licensing requirements for food service:

- Weekly menus written one week in advance, copies dated and kept on file for at least 30 days.
- Food must meet nutritional needs of those served.
- Each meal to meet at least 1/3 of servings recommended in USDA basic food group plan—daily food guide for age group served.
- Allow for a variety in menu planning.

THE FOOD PYRAMID

A GUIDE TO GOOD NUTRITION



What is the Food Guide Pyramid?

The Food Pyramid is a daily nutrition guide, to assist you in choosing a healthy diet. For good nutrition, choose a variety of foods each day, from each of the 5 food groups. Also, eat at least the recommended number of servings from each food group, so your body gets the nutrients it needs. Active people, children, teens, and pregnant women usually need more than the minimum daily servings listed above. To stay healthy you also need to get regular physical activity.

from the **Kaiser Permanente Healthwise Handbook**

- Special diets provided according to the recommendations of a physician or dietitian.
- No more than 15 hours between third meal of one day and first meal of following day.
- Between meal snacks must be made available.
- Cut, chop or grind food to meet individual needs.
- Eat a variety of foods.

Good Rules of Thumb

Listed below are a dozen tips in developing a menu at the home where you work:

1. Strive for *balance*, based on the food pyramid (numbers of servings and serving sizes);
2. Plan to eat a wide *variety* of foods (for example, different kinds of vegetables within the same class – for example, spinach, kale, and other dark leafy greens);
3. Emphasize a variety of *colors*, including green (for example, broccoli; green beans; lettuce), orange (for example, carrots, cantaloupe), red (for example, strawberry, tomatoes), and yellow (for example, summer squash) in addition to white, brown, beige, etc.;
4. Be sure to eat dark greens and yellow vegetables at least two or three times a week;
5. Emphasize non-animal sources of protein or lean meats, fish (excellent source of Omega-3 oils), and poultry – removing fat and skin, whenever possible;
6. Cook in ways (for example, steaming, roasting) that maintains vitamins and minerals;
7. Try alternative condiments (for example, salsa; humus) to butter, margarine, and sour cream;
8. Wash the outside of fruits (and vegetables) before eating or cooking, but keep as much of the skin as possible (fiber);
9. Avoid putting extra salt on foods;
10. Use oils, fats, and sweets sparingly, and when you do, use of canola or olive oil is recommended; and
11. Look for non-fat, low-fat, or reduced-fat alternatives, when using yogurt, milk, and cheese.

Improving Nutrition Gradually

Taste and habits play a major role in what we eat. If moving in a healthier direction, do so gradually, so as to avoid a sense of loss and to give the body time to adjust to the changes.

A Note on Dietary Supplements

Most people do not need food supplements, in the form of vitamin and mineral formulas (for example, One-a-Day Multiple Vitamins; calcium supplement), if they eat a nutritious, well-balanced diet. There are exceptions, especially if a person is taking certain medications regularly. The use of supplements should be discussed with each person's physician. In particular, ask:

- for anyone on anti-seizure medications, whether the person should take a One-a-Day Multiple Vitamin to get adequate folic acid.
- for a child on anti-seizure medication, whether he or she should take a Calcium and Vitamin D supplement.

Some Concluding Thoughts on Food and Nutrition

A good place to end this discussion of food and nutrition is with recommendations contained in the Surgeon General's *Report on Nutrition and Health.* According to the Surgeon General, most people should:

- Decrease intake of fat and cholesterol.
- Maintain appropriate weight.
- Increase intake of complex carbohydrates and fiber.
- Decrease intake of sodium (salt).
- Avoid too much sugar.
- Drink alcohol in moderation (two or fewer drinks per day) or not at all.

Activity:
Some Ways to Reduce Fat in the Diet

Let's brainstorm substitutes (or other changes) that would result in less *fat* in the diet.

Instead of:	***Choose:***
1. Whole milk	_____
2. Ice cream	_____
3. Butter, margarine	_____
4. Regular cheese	_____
	_____
5. French fries or hash browns	_____
	_____
6. Sour cream	_____
7. Oil-packed tuna	_____
8. Cooking oil, lard, shortening.....	_____
9. Fatty meats	_____
10. Vegetables in cream, or butter sauce	_____
11. Potato chips	_____

Adapted with thanks from work by Terri Lisagor, MS, RD.

Information Brief

Shopping, Handling, Preparing, and Storing Food

Shopping

Some helpful hints

Most households shop twice a week for food, sometimes picking up milk and fresh produce (vegetables, fruits, milk, meats) more frequently. Here are some ways to make your food dollar go farther, without sacrificing taste or nutrition:

- **Shop with a list** whenever possible. Starting with a list cuts down on *impulse buying* and food waste.

- **Larger sizes are usually a better value.** A half gallon (or, often two half gallons) of milk are cheaper than two one-quart containers. Just be sure you need the quantity and won't be throwing unused food away.

- **Know your way around the store.** If you don't need to hunt, shopping will go faster, and by spending less time in the store you will save money.

- **Buy store brands to save (up to 50%) over brand-names.** Check on store brand quality. If it is good, you can save (price per unit) some money.

- **Choose produce (fruits & vegetables) when they are "in season" and the price is relatively low.** This is an excellent way to save money, while assuring variety and balance.

- **Start by wheeling your shopping cart around the outside aisles**, because that is where fresh produce, dairy, and meat and fish are found. Prepackaged foods ease preparation time, but are more costly (per food unit) and often contain excessive amounts of sodium and other preservatives.

- **Watch out for sale items.** This caution applies especially to produce, since such sale items are often about to spoil. Check freshness dates on shelf items.

- **You can save with coupons and preferred shopper cards.** As long as the coupon is for an item you will use, it pays to use coupons and your preferred shopper card.

- **Convenience foods.** Weigh the value of convenience foods. One pays more for sliced than whole loaves of bread, for salad mixes, for packaged cake and cookie mixes. Salads, cookies, and other items are fun to fix, and good ways to involve members of the household in food preparation.

- **It pays to stoop down to lower shelves.** Food at eye level tends to have a higher mark-up than food on shelves near the floor. So, it pays to stoop.

- **Read labels, especially when buying a new item.** On packaged foods, new labeling requirements went into effect in 1994. These labels say a lot about calories and nutrients. Most shelves are labeled as well, and one can check out the cost per unit of products that vary in size.

Food Preparation

Food preparation is important for three reasons. First, one wants to conserve nutrients (for example, vitamins and minerals). Second, some foods (for example, ground beef, poultry) should be cooked well-done (for example, ground beef gray; poultry not bleeding), in order to be sure most (if not all) harmful bacteria have been killed. Third, taste and texture change with cooking. These factors call for steaming vegetables, quick-frying in water and little oil (for example, in a wok), and roasting (for example, potatoes). In the case of vegetables, it is important not to cook them too long, especially where nutrients will be washed away. Frying vegetables (or any other items) is also problematic. Frying improves taste for most of us, but excess oil can be a problem.

Vegetables. Proper preparation results in tastier, more nutritious food. Food that is badly prepared can end up being a third as nutritious as when it is prepared well. Fresh vegetables should be eaten soon after being purchased. Vegetables should be washed in running water (but not left to soak). Some (for example, potatoes) will need scrubbing to get the dirt off. It is better not to peel such vegetables, because a lot of nutritional value will be lost. Avoid boiling vegetables, because nutrients will end up in the water. Rather, microwave, steam, or stir-fry in water or a little bit of oil. Vegetables should not be overcooked, and they should be eaten right away. They should maintain their fresh color, generally, and not end up wet and soggy.

Meat, poultry, and eggs. Various methods of cooking have their *pros* and *cons.* For example, frying in oil or fat will retain most vitamins, but add to the fat content of the food. Wok cooking (high heat, little water or oil) works well, unless too much salt is added. Steaming works well, as does roasting, baking or broiling, although some nutrients will be lost. Cooking temperatures (165 degrees F internal temperature and up) destroy most bacteria.

The higher the temperature, the less time it takes to kill bacteria. At temperatures from 140 – 165 degrees F (internal temperature), bacteria will not grow, but they will survive.

Handling and Storage

Here are some safe handling tips, to avoid contamination and to kill bacteria:

- Ask the store clerk to put frozen items together in a bag. This will help maintain their temperature.

- Take items directly home, unpack them, and put them away – in the refrigerator, the freezer, or on shelves.

- Don't leave food items in the car, some items (for example, milk, poultry, meat) can quickly spoil.

- Always wash your hands before touching food, and throughout the process.

- Be sure food and water is from safe sources.

- Refrigerator: Keep the temperature of the refrigerator at or below 40 degrees Fahrenheit, but above freezing. Keep the freezing compartment at 0 degrees F.

- Meat and poultry: Keep meat and poultry refrigerated or frozen. Thaw meat and poultry in refrigerator. Keep raw meat and poultry separate from other foods. Do not put cooked meat or poultry on surfaces where the raw meat or poultry stood. (NOTE: This is often a problem when barbecuing.) Cook poultry and ground meat thoroughly.

- Keep hot foods hot (above 140 degrees F).

- Wash working surfaces (including cutting boards), utensils, dishes in hot, soapy water, or better, in a dishwasher. If washed in the sink, let items air dry.

- Keep all equipment (for example, toaster, mixers, etc.) clean and in good working order.

- Cover and refrigerate leftovers immediately or discard. (It is good practice, to write a date on the cover.)

Bacteria like warm temperatures and moist places. They grow best (and produce toxins) between 60 degrees F and 120 degrees F. Refrigerator temperatures (between 32 and 40 degrees F) allow the slow growth of bacteria. Freezing temperatures (0 – 14 degrees F) prevent growth of bacteria but do not kill them.

Avoid outdated and spoiled food
When in doubt, throw it out!

Many food items – both at the store, and in the refrigerator — have *expiration dates.* Such items should not be purchased beyond the expiration date, and should either be thrown away or checked carefully for wholesomeness before being used. Products vary greatly in how long, even in the refrigerator, they will remain edible. Often it is only a day or two. If individuals in the home have open access to food in the refrigerator, it is important to exercise sufficient supervision to assure that no one eats food that has spoiled. In terms of emergency supplies (for example, canned goods), dating the containers is very important, because while canned goods remain wholesome much longer than fresh produce, dairy products, non-frozen meat and the like, their "shelf life" is not endless, and every six months or so, such food should be used up or thrown out and replaced.

Activity:
Food Label Exercise

See food labels on the next page.

1. **What do the labels tell you about calories?**

2. **What, if anything, does the order of ingredients tell you?**

3. **What can you learn from these labels about fat, cholesterol, sodium, and fiber?**

4. **What else can one learn from food labels?**

Brand X Pure Premium OJ

32 FL OZ (1 QT) 946mL

Nutrition Facts

Serving Size 8 fl oz (240 ml)
Servings Per Container 4

Amount Per Serving	
Calories 110 Calories from Fat 0	
	% Daily Value*
Total Fat 0g	0%
Sodium 0mg	0%
Potassium 450mg	13%
Total Carbohydrate 26 g	9%
Sugars 22g	
Protein 2g	
Vitamin C 60% • Calcium 2%	
Thiamin 10% • Niacin 4%	
Vitamin B6 6% • Folate 15%	
Not a significant source of saturated fat, cholesterol, dietary fiber, vitamin A and iron	
*Percent of Daily Values are based on a 2,000 calorie diet.	

Other container labeling:

Meets American Heart Association food criteria for saturated fat and cholesterol for healthy people over age 2.

Naturally **sodium** free.
No **water** or **preservatives** Added.

Keep Refrigerated

Best if used within 7 to 10 days after opening.

Pasteurized

Deli Macaroni Salad

Net Wt. 16 OZ. (1LB) 454g

Nutrition Facts

Serv. Size 3/4 cup (145g)
Servings: 3

Amount Per Serving	
Calories 330 Fat Cal. 210	
Amount per Serving	% Daily Value*
Total Fat 23g	36%
Saturated Fat 3.5g	17%
Cholesterol 15mg	5%
Sodium 770mg	32%
Total Carb. 27 g	9%
Fiber 2g	7%
Sugars 22g	
Protein 5g	
Vitamin A 0% • Calcium 2%	
Thiamin 10% • Niacin 4% Vitamin C 0% • Iron 10%	
Not a significant source of saturated fat, cholesterol, dietary fiber, vitamin A and iron	
*Percent of Daily Values are based on a 2,000 calorie diet.	

INGREDIENTS: Cooked Enriched Macaroni (semolina, niacin, iron, thiamin mononitrate, riboflavin, folic acid), Mayonnaise (soybean or canola oil, egg yolks, water, vinegar, corn syrup, salt, spice, calcium disodium EDTA), Sweet Pickles (pickles, high fructose corn syrup, water, vinegar, salt, modified food starch, sodium benzoate, natural flavorings, calcium chloride), Corn Syrup, Celery, Water, Onions, Red Bell Peppers, Salt, Vinegar, Mustard (water, vinegar, mustard seed, salt, sugar, soybean oil, spices, tumeric, zanthan gum, annato, calcium disodium EDTA), Potassium Sorbate, to protect flavor, Sugar Zanthan Gum, Annato Coloring

Brand X Beef & Green Chili Burritos

10-4 OZ BURRITOS,
NETWT 40 OZ (2.5 LBS) 1,134g

Nutrition Facts

Serving Size 1 Burrito (113g)
Servings Per Container 10

Amount Per Serving			
Calories 290 Calories from Fat 120			
			% Daily Value*
Total Fat 14g			21%
Saturated Fat 5g			24%
Cholesterol 15mg			5%
Sodium 270mg			10%
Total Carbohydrate 34 g			11%
Dietary Fiber 3g			13%
Sugars 1g			
Protein 8g			
Vitamin A 0% • Vitamin C 6%			
Calcium 2% • Iron 15%			
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat. Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4			

INGREDIENTS: Flour Tortilla (bleached wheat four enriched (niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), water, soybean oil . . . .

Information Brief

Importance of Regular Physical Activity

Regular physical activity helps to maintain physical (and emotional) fitness. Moving about aids digestion and elimination, stresses muscles and joints (helping maintain bone density), and maintains strength. If stretching is a part of regular physical activity, flexibility is enhanced. And, if a person exercises vigorously every other day, for thirty minutes or more, the cardiovascular system will become more efficient.

If a person has not been exercising regularly, it is wise to check with one's physician before embarking on an exercise plan, and to move slowly in the new direction, paying close attention to how the person reacts to increased effort.

Walking, Hiking, Swimming

Brisk walking is among the very best ways to exercise. Such walking will increase the person's heart rate, but not stress joints like jogging will. Hiking, with changes in terrain, is another excellent exercise. Swimming or water aerobics is great as well. Swimming, because the water holds up the body, puts minimal (or no stress) on knees and other joints.

[1] This section relies heavily on Karen Green McGowan & Jim McGowan, *Assessing Health Risk in Developmental Disabilities (1995)*, pp. 2-17 to 2-21.

Other Physical Fitness Activities

Many other physical fitness activities contribute to wellness. Different people like different activities. Some like team sports such as basketball, baseball, and volleyball. Other individuals likes sports such as hiking, walking, or jogging. Most communities put on a variety of walks and runs where the individual with a disability can readily participate with non-disabled people who enjoy the same activity. Here is a list of potential benefits from regular exercise:[2]

- Relieves tension and stress
- Provides enjoyment and fun
- Stimulates the mind
- Helps maintain stable weight
- Controls appetite
- Boosts self-image
- Improves muscle tone and strength
- Improves flexibility
- Lowers blood pressure
- Relieves insomnia
- Increases "good" cholesterol (HDL)
- Prevents diabetes

[2] Kaiser Permanente, *Healthwise Handbook* (1998), p. 245.

Information Brief

Infection Control

The world contains millions of microorganisms, the vast majority of which are harmless, or actually play a positive role (for example, in digestion, elimination). A few can cause illness or infection. For this reason, they are called *pathogens.* In this section, we will talk about (1) common germs; (2) ways they are spread or transmitted to us; (3) barriers (or defenses) to their invasion; (4) how to tell whether illness or infection has occurred; and (5) treatment. Two major classes of microorganisms are **bacteria** and **viruses.** One reason to distinguish these microorganisms (or germs) is because *antibiotic* medication (for example, penicillin) works for bacterial infections, but not viral. Other microorganisms that can cause illness include **yeast**, **molds**, **fungi,** and even bits of protein (for example, **prions** and "Mad Cow Disease").

Signs of Infection

A change in activity level (slowing down) or in appetite (not eating) may be the first sign of infection, especially for the person who uses few words. DSPs need to pay attention to subtle changes in both activity level and/or appetite, to assure that illness and infection is reported to the individual's physician and the individual is treated early. Here are sets of symptoms and what they *may* mean.

WOUND	Pain, swelling, redness, tenderness, pus and/or red streaks from the wound.
EYES	Redness, swelling of the eyelid, eyes burning or painful, discharge. Could be allergy if discharge is clear; infection likely if yellowish or greenish.
EARS	Pain, pulling at ear, redness, fever, diminished hearing, drainage possible.
THROAT	Pain with swallowing, refusal to eat, redness, possible whitish patches at back of throat, hoarse voice, possibly fever or skin rash.
TEETH	Pain, refusal to eat, facial or gum swelling, gum bleeding, fever.
RESPIRATORY SYSTEM	Cough, phlegm (mucous), shortness of breath or wheezing, fever. A fever or chills that develop near the end of a cold may indicate pneumonia. Fever with rash, stiff neck, headache, irritability or confusion

	may indicate meningitis. Nasal congestion with severe headache and pain in the nose, cheeks, or upper teeth may indicate sinus infection.
DIGESTIVE SYSTEM	Abdominal pain that keeps getting worse and is accompanied by vomiting and/or loose stools, fever.
URINARY TRACT	Difficult urination, pain or burning, changes in urine color (clear to cloudy; light to dark yellow), fever. May also be vomiting and/or loose stools. Complaints of pain on one or both sides of the mid-back, fever, chills, nausea, and vomiting may indicate kidney infection.
TOXIC SHOCK SYNDROME	Women who develop fever, vomiting, diarrhea, rash, especially during menstruation.
VAGINAL INFECTION	Vaginal discharge, itching, unusual odor, burning.

The DSP should seek a physician's advice regarding any of these symptoms. The DSP should always take precautions to prevent the spread of infections.

How Infections Spread

Understanding the way germs enter the human body is crucial. Some *pathogens* are largely or exclusively:

(1) blood-borne (for example, HIV; Hepatitis B);

(2) air-borne (for example, Chicken Pox, Tuberculosis, Common Cold);

(3) food-borne (for example, E. coli; Salmonella);

(4) water-borne (for example, Dysentery, "flu");

(5) insect-borne (for example, mosquitoes and Malaria; ticks and Lyme disease); or

(6) passed on through direct human contact (for example, exchange of bodily fluids).

If a person has a Cold, and sneezes, droplets in the air can enter another's body. Or, if the person wipes their nose without washing their hands, the germs can be spread readily through touch. Mucous membranes of the nose, mouth, and eyes are particularly susceptible.

Some germs enter through breaks in the skin. For example, a person with Hepatitis B nicks his face while shaving and leaves the infected blood on the razor. If another person uses the razor and then nicks himself, he may become infected with the Hepatitis B virus.

Other infections are spread through semen or vaginal secretions; saliva (for example, "Mono"); or bodily waste products (feces or urine). Many germs enter the body in more than one way (for example, HIV is

spread largely through blood, semen, or occasionally breast milk).

One should be careful not to transmit infection to others and equally important, one should be careful not to be infected by others. Hand-washing and the use of disposable gloves are two ways to prevent infection.

Hand-Washing

To prevent the spread of germs, frequent and vigorous hand-washing is considered the most important single thing a person can do. Here is the technique for proper hand-washing (See Figure 1):

- Remove rings and watch.
- Wet hands under running water, from wrist down.
- Apply soap (liquid preferred, rather than bar).
- Wash vigorously for at least 15 seconds. Scrub all surfaces with particular attention to fingertips and nails.
- Rinse hands, from the wrist down, under running water.
- Use paper towels, single-use cloth towel, or warm air dryer to dry hands, rather than a cloth towel used repeatedly and by others.
- Avoid recontamination by not touching germ-laden surfaces (for example, toilet seat, sink) after washing. Use a second paper towel to turn off faucet.

Be sure to wash hands upon arrival at work, and *before* touching:

- Food,
- Someone's medicine,
- Kitchen utensils or equipment,
- Someone's non-intact skin,
- Gloves to be put on.

Be sure to wash hands *after*:

- Going to the toilet,
- Sneezing, coughing, or blowing your nose,
- Touching your mouth, nose, or other part of your body,
- Touching any bodily fluids (except sweat),
- Touching someone's soiled clothing or linens,
- Providing assistance with medications,
- Removing and disposing of your gloves,
- Touching anything else that could be contaminated with germs.

Standard Precautions

Standard Precautions are an approach to infection control. These precautions apply to all blood, all body fluids, secretions, and excretions (except sweat), whether or not they contain visible blood. They also apply

Figure 1
Hand-Washing Technique

Assemble Equipment: Soap (bar or liquid), paper towels, warm running water, waste container.

Standing away from sink, turn on faucet and adjust water temperature. Keep your clothes dry moisture breeds bacteria.

Wet hands and wrists, keeping your hands lower than your elbows so water runs off your fingertips, not up your arm.

Use a generous amount of soap, rubbing hands together and fingers between each other to create a lather. Friction helps clean.

Continue to rub, push soap under your fingernails and cuticles with a brush or by working them in the palm of your hand. Use soap above your wrist about two inches. Wash for one minute.

Being careful not to touch the sink, rinse thoroughly under running water. Rinse from just above the wrists down to fingertips. Do not run water over unwashed arm down to clean hands.

Using a clean paper towel, dry from tips of fingers up to clean wrists. Again, do not wipe towel on unwashed forearm and then wipe clean hands. Dispose of towel with out touching waste contain If your hands ever touch the sink or waste container, start over.

Using a clean paper towel, turn off faucet, which is considered contaminated. Properly discard towel. Apply lotion if hands are dry or chapped.

to mucous membranes and where there is a cut or abrasion. *Universal Precautions,* the earlier concept, did not call for use of gloves when dealing with urine, feces, tears, and saliva unless visibly contaminated with blood. One doesn't necessarily know whether a person has Hepatitis B or HIV, two blood-borne pathogens. Nor can one always be sure certain fluids do not contain blood.

Disposable gloves

Disposable (single-use) latex or vinyl gloves should be worn when assisting a person with:

- Cleaning the rectal or genital area,
- Giving mouth care (for example, helping with tooth-brushing),
- Shaving with a disposable blade razor,
- Cleaning toilets,
- Cleaning up urine, feces, or vomit,
- Menstrual care and disposal or sanitary supplies,
- Performing wound care.

It's a good idea to wear gloves when helping a person bathe or shower, if there are any openings (cuts, rashes, etc.) on the DSP's hands. For protection of the person being bathed or helped in the shower, one should always start at the top (for example, hair, face, etc.) and work down, being careful to avoid self-contamination via wash clothes and splashed water in and around the face. It is vitally important to change gloves, use a fresh wash cloth (if one is being used), and to wash hands when assisting one person, and then moving on to help a second person, since one is seeking to avoid cross-contamination. Figure 2, on the next page, describes the way in which gloves should be put on (to protect the person assisted) and removed (to protect the DSP). If contaminants on the gloves touch your skin, or if a glove breaks, simply take it off, and vigorously and thoroughly wash your hands.

Other protective equipment

Depending on your job, you may be expected to wear other personal protective equipment (PPE), like a face mask or eye shields. If you need these, get expert help in how to use and dispose of them properly.

Infection control is a two-way street. Occasionally, one sees a person wear dirty or contaminated gloves, using them over and over. To be sure, this may protect the wearer from infection, but it does nothing to prevent spreading infection to others. Indeed, just the opposite – without frequent and thorough washing, it is almost guaranteed to spread germs.

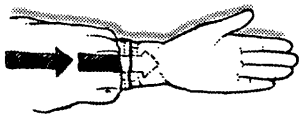
Immunizations

Vaccinations have largely eliminated many diseases, such as Polio, Whooping Cough, and Measles. Older people, plus younger ones whose health is compromised in certain ways, can also benefit from "flu shots" and vaccination against Pneumonia. (Figure 3, is a typical schedule of

Figure 2
Gloving Technique

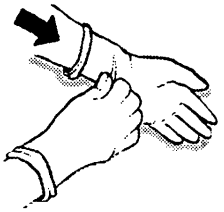
Putting on non-sterile gloves

- Wash your hands following proper procedure.
- If you are right handed, remove one glove and slide it on your left hand (reverse, if left handed).
- Pulling out another glove with your gloved hand, slide the other hand into the glove.
- Interlace fingers to smooth out folds and create a comfortable fit
- Carefully look for tears, holes or discolored spots and replace the glove if necessary.

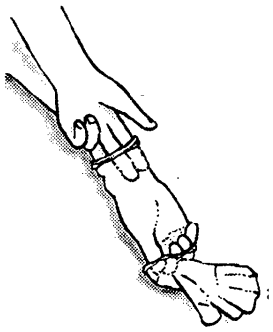


- If wearing a gown, pull the cuff of the gloves over the sleeve of the gown.

Removing non-sterile gloves



- Touching only the outside of one glove, pull the first glove off by pulling down from the cuff.
- As the glove comes off your hand it should be turned inside out.
- With the fingertips of your gloved hand hold the glove you just removed. With your ungloved hand, reach two fingers inside the remaining



glove, being careful not to touch any part of the outside.

- Pull down, turning this glove inside out and over the first glove as you remove it.
- You should be holding one glove from its clean inner side and the other glove should be inside it.
- Drop both gloves into the proper container.
- Wash your hands using proper procedure.

Figure 3

Immunization Schedule

Immunization → / Age ↓	Diphtheria Pertussis Tetanus (DPT)	Polio (OPV/IPV)	Measles Mumps Rubella (MMR)	Chickenpox (Varicella)	Hepatitis B (HBV)	*Haemophilus influenzae* b (Hib)	Tetanus Diphtheria (Td) booster
Birth - 2 months					✓		
1 - 4 months					✓		
2 months	✓	✓				✓	
4 months	✓	✓				✓	
6 months	✓					✓	
6 - 12 months					✓		
6 - 18 months		✓					
12 - 15 months			✓			✓	
12 - 18 months	✓			✓			
4 - 6 years	✓	✓	✓[1]				
11 - 12 years			✓[1]	✓[2]	✓[3]		
11 - 16 years							✓
Adult			✓[4]		✓[5]		Every 10 years
Over 65	Pneumococcal vaccine (one time only)[6] Influenza (flu) vaccine (annually)[6]						

[1] The second MMR may be given at either ages 4-6 or 11-12 years.

[2] Those who have not been vaccinated, have not had chickenpox, or for whom a blood test indicates they are not immune should be vaccinated at this age.

[3] HBV vaccination at these ages is recommended if it was not given earlier.

[4] Vaccine recommended for adults without record of two doses in childhood. Women trying to get pregnant should have a blood test to check for rubella immunity.

[5] Adults under 25 or at increased risk for hepatitis B infection should receive the hepatitis B vaccine series (see page 28).

[6] People younger than 65 who have chronic diseases, especially respiratory illnesses, such as asthma, should also consider receiving the pneumococcal vaccine and annual flu shots.

Adapted from *The Advisory Committee on Immunization Practices,* American Academy of Pediatrics, 1996.

vaccinations for individuals in good general health. Recommendations are from Kaiser Permanente.)

Antibiotics

Bacteria are both good and bad. Our bodies need certain bacteria to stay healthy. However, even these "good" bacteria can turn "bad." Infection is caused when the body's natural defenses break down, and normally harmless bacteria invade and grow in tissue where they don't belong.

Antibiotic medications are effective in the treatment or infections because of their ability to kill bacteria without harming tile body. There are many types of bacteria that can cause infection and a particular antibiotic may or may not be the right one to kill the bacteria causing the current infection. If the prescribed antibiotic doesn't start to work within 2 days, call the physician. The physician may try a different antibiotic or order a lab test to identify the type of bacteria and the antibiotic that will work best. Be sure to tell the physician about all of the medications being taken, especially if the medications have been prescribed by another doctor.

Bacteria can become resistant to antibiotics which makes treatment more difficult. If you keep in mind the following guidelines when assisting an individual with antibiotic medicine, it will help complete a successful treatment:

- the antibiotic should be taken until it is completely gone;
- follow the directions and schedule exactly and don't skip doses;
- if there is any left, do not use it later for the same person or another person with the same symptoms; and
- always wash your hands before and after assisting someone with medicine.

Other Ways to Reduce Spread of Infection

- Cleaning up spills of bodily fluids and disinfecting, using 1/4 cup of chlorine bleach per gallon of water (1:10 solution)
- Handling soiled laundry as little as possible
- Washing soiled clothing and linens separately from other clothes
- Use of paper towels through out house
- Making sure residents follow good hand-washing practices (for example, before touching food, after using the bathroom)
- Keeping clean hands away from the face and other areas of the body
- Use of own toiletries and equipment (for example, combs, brushes, razors, etc.)

- Use of own cloth towels, frequently washed, and kept in each person's room

- Frequent cleaning of contaminated surfaces (for example, kitchen counters, toilets and sinks, bathtubs, showers)

- Not rinsing mop in kitchen sink

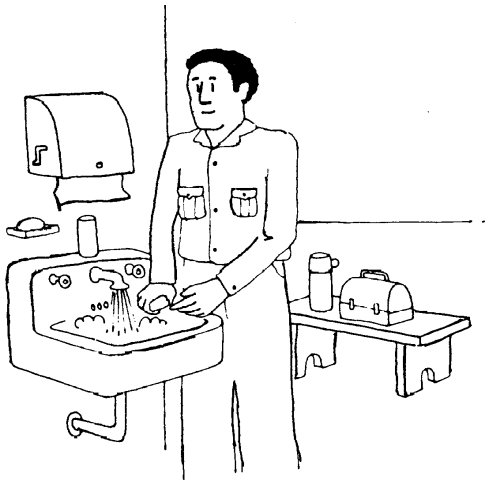
- After washing the dishes, putting sponge in dishwasher, or nuking it in microwave for a minute or two

- Keep rooms in home clean and well-ventilated

- Use disposable tissues to cover mouth and nose when coughing or sneezing

- Caregivers who are in a contagious stage of an illness should not work closely with others

- Get vaccinated

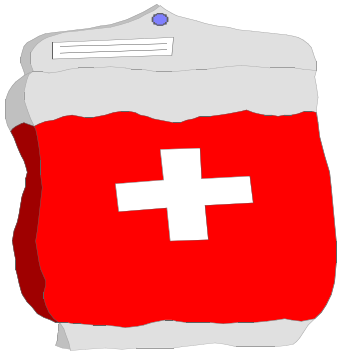


Information Brief

Safety Around the House

DSPs can increase safety around the house and reduce the likelihood of injury or death by doing the following:

- ✓ Eliminating hazards (for example, slippery floors) around the house;
- ✓ Doing things in a safe manner (for example, lifting, helping with transfers);
- ✓ Education and training to reduce risk and to respond appropriately when injuries happen;
- ✓ Sharing information about hazards; and
- ✓ Preparation, developing contingency plans, and practice.



Chemicals and Other Toxic Substances

Labeling and Storage

Here is a list of common household poisons:

Alcohol
Air freshener
Aspirin
Bleach
Cigarettes and tobacco
Cosmetics
Dishwasher detergent
Dishwashing detergent
Drain cleaner
Drugs of any kind
Furniture polish
Glass cleaner
Grease remover
Insecticide
Laundry detergent
Moth balls
Nail polish and nail polish remover
Oven cleaner
Paint and paint thinner
Scouring pads
Scouring powder
Toilet cleaner
Weed killer

These items must be (1) stored in their original containers, (2) kept separate from food items, and (3) be inaccessible (for example, locked up) to people who might not know how dangerous it would be to ingest them, get them on their skin or in their eyes.

Preparation and responding

1. Post phone numbers of doctors and Poison Control Center near the main phone;

2. Keep *ipecac syrup*[1] on hand, under lock and key. Do not use it to induce vomiting unless Poison Control says to do so; if vomiting occurs, save what is thrown up (vomitus).

3. When a poisoning incident occurs, and you call the Poison Control Center:
   - remain calm;
   - report the source of the poisoning (brand name and label, if possible);
   - report the amount ingested (if you don't know, say so);
   - report age and weight of the person; and
   - report elapsed time.

4. Flush eyes, if chemicals or other toxic substances have been splashed.

In 1997, the California State Poison Control System was inaugurated. Everyone in California can use a common number, **1-800-876-4766** (or **1-800-8POISON**), and your call will be automatically routed to the appropriate division able to respond to your call.

[1] *Syrup of ipecac* will induce vomiting. Some poisons (for example, petroleum-based products, acids) are such that inducing vomiting is not a good approach, because of potential added damage to the esophagus, lungs, and mouth. Ipecac syrup in the bottle loses its effectiveness with the passage of time. Therefore, check expiration dates and replace, as indicated.

A Safe Environment, and Being Careful

Home accidents in the United States claim about 20,000 lives per year, more than work-related accidents, but less than motor vehicle accidents. A 1992 National Health Interview Survey revealed that 1 of every 13 Americans suffered a home injury that required medical attention. We have dealt with poisonings (the second leading cause of home accident deaths). Here are other hazards. [Figure 4 shows the Disaster Plan form that most Community Care facilities use. .Make sure you know where the Disaster Plan is posted and are familiar with the information and the information is current.]

Falls

One of every three home accidents is a fall. Some 7,000 Americans die each year from falls at home. Where there are flights of stairs, stepping on an unseen object (for example, marbles, a skate) is particularly hazardous. Other falls occur in bathtubs, on ladders, from roofs, and even falling out of bed. Yet, one of every four falls is on a level surface. Some people are in too much of a hurry, horse around, failed to see an object, or fall for some other reason (for example, dizziness; tripping over one's own feet).

What can be done? We can help by:

✓ Encouraging everyone to *watch their step;*

✓ Being sure nothing (clothes, toys, books, etc.) is on stairways;

Figure 4
Disaster Plan

STATE OF CALIFORNIA - HEALTH AND WELFARE AGENCY

DEPARTMENT OF SOCIAL SERVICES
COMMUNITY CARE LICENSING

EMERGENCY DISASTER PLAN FOR RESIDENTIAL CARE FACILITIES FOR THE ELDERLY, COMMUNITY CARE FACILITIES AND CHILD DAYCARE CENTERS

INSTRUCTIONS:
Post a copy in a prominent location in facility, near telephone.
Return a copy to the licensing office. Licensee is responsible for updating information as required.

NAME OF FACILITY	ADMINISTRATOR OF FACILITY

FACILITY ADDRESS (NUMBER, STREET, CITY, STATE, ZIP CODE)	TELEPHONE NUMBER
	( )

I. AFFIRMATION STATEMENT

AS ADMINISTRATOR OF THIS FACILITY, I ASSUME RESPONSIBILITY FOR THIS PLAN FOR PROVIDING EMERGENCY SERVICES AS INDICATED BELOW. I SHALL INSTRUCT ALL CLIENTS/RESIDENTS, AGE AND ABILITIES PERMITTING, ANY STAFF AND/OR HOUSEHOLD MEMBERS AS NEEDED IN THEIR DUTIES AND RESPONSIBILITIES UNDER THIS PLAN.

SIGNATURE	DATE

II. ASSIGNMENTS DURING AN EMERGENCY (USE REVERSE SIDE IF ADDITIONAL SPACE IS REQUIRED)

NAME OF STAFF	TITLE	ASSIGNMENT
1.		DIRECT EVALUATION AND PERSON COUNT
2.		HANDLE FIRST AID, AS NEEDED
3.		TELEPHONE EMERGENCY NUMBERS
4.		TRANSPORTATION, IF NEEDED
5.		OTHER (DESCRIBE)
6.		

III. EMERGENCY NAMES AND TELEPHONE NUMBERS (9-1-1 NOT ACCEPTABLE)

FIRE/PARAMEDICS	POLICE OR SHERIFF
RED CROSS	OFFICE OF EMERGENCY SERVICES
PHYSICIAN(S)	POISON CONTROL
HOSPITAL(S)	AMBULANCE
DENTIST(S)	CRISIS CENTER
CHILD PROTECTIVE SERVICES	OTHER AGENCY/PERSON

IV. FACILITY EXIT LOCATIONS (USING A COPY OF THE FACILITY SKETCH [LIC 999] INDICATE EXITS BY NUMBER)

1.	2.
3.	4.

V. TEMPORARY RELOCATION SITE(S)

NAME	ADDRESS	TELEPHONE NUMBER
		( )
NAME	ADDRESS	TELEPHONE NUMBER
		( )

VI. UTILITY SHUT—OFF LOCATIONS (INDICATE LOCATION(S) ON THE FACILITY SKETCH [LIC 999])

ELECTRICITY

WATER

GAS

VII. FIRST AID KIT (IF REQUIRED)

VIII. EQUIPMENT

SMOKE DETECTOR LOCATION (IF REQUIRED)

FIRE EXTINGUISHER LOCATION (IF REQUIRED)

TYPE OF FIRE ALARM SOUNDING DEVICE (IF REQUIRED)

LOCATION OF DEVICE

LIC 610 (10/92) (PUBLIC)

- ✓ Installing night lights;
- ✓ Carpeting stairs (for example, rubber runner on stairs to basement);
- ✓ Replacing worn out carpet, and making sure it doesn't come loose;
- ✓ Installing and maintaining handrails;
- ✓ Taking one step at a time;
- ✓ Using well maintained ladders and being spotted by someone;
- ✓ Getting a better ladder (or moving one) rather than stretching to reach;
- ✓ Using a rubber mat in the bathtub or shower stall;
- ✓ Installing and using grab bars in the bathtub or shower stall;
- ✓ Making sure throw rugs are securely fastened to the floor; and
- ✓ Where it is icy, having sand or salt to put on porches and other icy pathways.

Fires

Fires are the third leading cause of accidental deaths in the home, and often result in serious injury and cause extensive property damage. Many fires are the result of neglect, indifference, carelessness, or laziness. One-third of deaths from fire (burning or smoke inhalation) occur between midnight and 4:00 A.M., when most people are sleeping. The most common cause of fire is careless smoking. To minimize this hazard, enforce the following rules:

- Don't ever smoke in bed;
- If smoking inside or outside the home, set a burning cigarette down in an ashtray;
- Use a tin can with sand, and dispose of cigarette butts there; and
- Never empty this can just after burying a butt in the sand.

Lightening and brush fires can engulf homes. Installing a lightening rod (for a home on a hilltop) and building firebreaks around a home in a wooded or grassy area are two things people can do to reduce the hazard. Frequent cleaning of ovens and fireplaces is important; not leaving matches around for people to get into; not overloading electrical circuits; avoiding frayed or shredded electrical cords by not using extension cords running under rugs are additional preventive measures. Space heaters are especially dangerous, and wet clothes should never be dried on such heaters, electric lamps, or the furnace.

Here are some other things you can do to prevent and respond to fires:

1. Don't let rubbish (especially paper, rags and old clothes) accumulate under stairs, in the attic, or basement.
2. Keep flammable liquids in tightly closed metal containers, away from heat sources.
3. Rags used to wipe up oil or paint should be stored in tightly closed metal containers, and disposed of quickly.

4. Do not leave matches or cigarette lighters around.

5. Keep a close eye on gas appliances, and be sensitive to gas leaks; call the gas company and get out of the house if you smell gas.

6. Be careful with all electrical appliances and make sure they are in good working condition (for example, hair curling iron; toaster).

7. Check smoke detectors monthly and replace batteries once a year (say, on the Administrator's birthday) or as needed .

8. Have fire extinguishers in the house, know how to use one, and have them serviced periodically.

9. Teach everyone in the home what to do if a fire occurs, and practice.

Fire arms

Fire arms exist in many homes. They should always to locked up, be unloaded, and have trigger locks as well. Ammunition should be stored under lock and key elsewhere in the house. It is important to teach everyone about guns: for example, never to point even a toy gun at someone (lest the person think it is real, and shoot back), and to call a responsible adult if a gun is ever encountered in the home.

Drowning

People can drown not only in natural bodies of water, but in bathtubs, swimming pools, and hot tubs. Community Care Licensing requires fences around swimming pools with locked gates, and careful supervision by someone trained and certified in water safety. Here are other tips:

- Teach everyone water safety (and, if possible, how to swim).

- Don't allow diving into water less than four feet deep.

- Don't allow horsing around, running on the deck, or game-playing where a person could hit their head on the side of the pool.

Never leave a small child or anyone else with cognitive or physical conditions (for example, uncontrolled seizures) in a bathtub, shower stall, hot tub, swimming pool or other body of water for any reason.

Tools and appliances

While tools and appliances result in few deaths each year, they account for a very large number of injuries and trips to emergency rooms. Most homes have a variety of tools and appliances for the yard (lawn mowers, saws, etc.) and within the home itself (lamps, toasters, ovens, freezers, TVs and stereo equipment, and the like). Remember ***water and electricity don't mix!*** Electric shocks can be fatal if the person is sitting or standing in water, or has water on his or her hands. Thus:

- Don't use any, plug-in electrical appliance in the bathroom or any place where there is water (for example, near the swimming pool);

- Don't get your hands wet and reach for an electrical plug, or touch an electrical appliance like a toaster;

- Cover electric outlets that are not in use; and

- Always unplug appliances before trying to repair or clean them. Even if unplugged, be especially careful of television sets, because they store electricity.

As for hand and power tools in workshop, lawn or garden, (1) keep away from saw blades; (2) wear goggles when hammering, sawing, trimming, or mowing the lawn; and (3) have someone explain (and demonstrate) what to do (and, what not to do). Go slowly and focus on learning.

Communicating Potential Hazards to Co-workers and Individuals

Here are some ways to communicate potential hazards:

1. Put up signs that people can read and understand (for example, universal safety symbols);

2. Rope off (or block off) dangerous areas;

3. Remove for repair any broken appliance or appliance with cut or frayed electrical cords;

4. Remove broken glass (if window broken), and use cardboard and tape to cover the area where the glass was;

5. Tell people of the danger, and show/explain what to do and not to do;

6. Report the hazard immediately to your administrator, and determine what actions to take; and

7. Write a note in the Staff Communication Log, if you have one, alerting others to the hazard.

Implementing Strategies to Correct Unsafe Conditions

In the event of structural damage to the home, or the smell of gas, or other hazardous condition whose significance is not completely understood, it makes sense to evacuate the home and to get immediate help from outside the home (say, by calling the gas company to come out and look for a gas leak).

When other damage occurs (for example, broken window; sparks from the toaster), one should remove the item or block use of it, until such time as it can be repaired or replaced.

Do not ignore hazardous practices (for example, using equipment improperly; leaving matches around; not locking up guns and ammunition). Inform the licensee or administrator about the hazardous condition. Talk about and agree on how to correct the unsafe condition. In the meantime, one must do everything possible to protect people from injury.

Activity:
Practice Dealing with Poisoning or Drug Overdose

DIRECTIONS: Pair up with another student, and role-play calling the Poison Control Center . One person will pretend to call the Poison Control Center. The other person will play the Poison Control Center representative. There are four situations. Each student should make two of the calls.

Scenario #1. – "One of our children was playing in the field beside our house, and picked up a mushroom growing there and ate it. He brought in a small piece of the stem, but I don't know how to identify poisonous from non-poisonous mushrooms. What should I do?"

Scenario #2. – "We just admitted a new resident to the home. You won't believe this, but he had various strength THORAZINE (chlorpromazine) in his clothes and various boxes. Apparently, his roommate found at least one on the floor and ate it. The pills do look like M&Ms. The roommate fell asleep eating dinner. We roused him and tried to find out what color the pill was, but he is unsure. It was either brown or red. What should we do?"

Scenario #3. – "A man with a developmental disability who lives with me was doing the dishes, and he says that he tried some of the dishwasher detergent (granule form). What should I do?"

Scenario #4. – "Sam was using Super Glue on his model airplane project. When he was brushing back his hair, he got a gob of the glue in his eye, . . . or, at least I think he did, because his eye is closed. What should I do?"

Information Brief

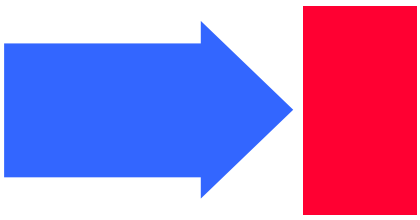
Safe Practices When Lifting and Assisting Others

Lifting and Protecting One's Back

At some time during their lives, four out of five people experience back problems (muscle spasms, slipped discs, etc.). Minimizing back problems calls for two things: (1) proper use of your body when lifting, pushing, or reaching for things; and (2) exercises to strengthen your back. Regarding the former, it is a good idea to:

- ✓ Push, not pull (a garbage container; a dolly; a cart);
- ✓ Move, not reach (to get the things you need);
- ✓ Squat, not bend (when you have to reach down to get something); and
- ✓ Turn, not twist (when you want to go in a different direction).

Figure 5 shows proper body mechanics when lifting, moving or reaching for things.



Helping with Transfers, Positioning

Helping individuals with impaired mobility

Individuals with greatly impaired mobility (for example, due to cerebral palsy, spinal cord injury, spina bifada, and the like) need extra, more skillful support to remain comfortable and healthy.

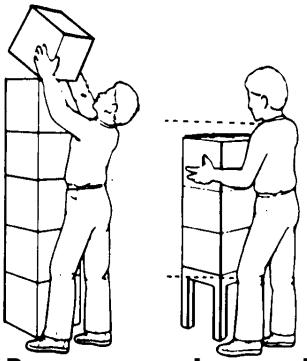
- *Hypertonus (spasticity)* is too much muscle tone. Muscles become stiff and resist moving.
- *Hypotonus* is too little muscle tone, such that they have too little strength to move.
- *Fluctuating muscle tone (athetosis or ataxia)* involves unpredictable fluctuation from too much to too little tone. The movements appear uncontrollable.

Individuals need to be up as much as possible, rather than lying in a horizontal position. Gravity (2.2 pounds per square inch of body surface) plays havoc with body systems, especially respiratory, digestive, and urinary. Disability stemming from immobility or lack of motion was identified in 1960, by the U.S. Public Health Service, as one of ten preventable health problems.[1] Pneumonia,

[1] Cited by McGowan & McGowan, *Assessing Health Risk in Developmental Disabilities* (1995), p. 1-14.

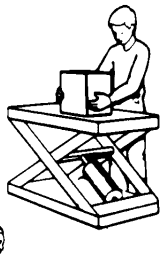
Figure 5
Principles of Good Body Mechanics

Keep the natural curve of the spine intact A commonly recognized problem is lifting loads from the floor. But overhead loads can also be hazardous. It is better to build platforms to store loads off the floor (above knee height) to eliminate bending over, and to keep loads below shoulder height.

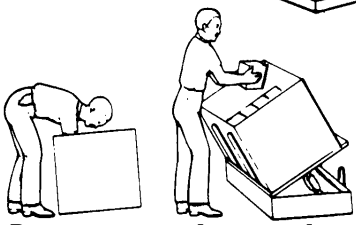


Poor **Improved**

Lift loads at about waist height
Ideally, loads should be at about waist height when lifted. For example, adjustable height stands can be used to raise pallets of boxes up and down to the right height (and also accommodate employees of varying heights).

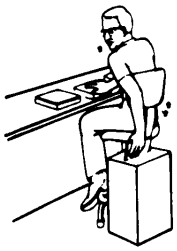


Adjustable-height 'Scissors Lift'



Poor **Improved**

Reaching down into tubs and bins is a common source of back stress. Possible solutions include hydraulic tilters, springloaded bottoms, and drop-down or removable sides.



Eliminate twisting motions
Twisting motions, especially with a heavy load. place considerable stress on the spine. Improved layout is usually the best approach for eliminating this issue.

osteoporosis (due to absence of weight bearing), gastro-esophageal reflux disease (GERD), and other conditions arise. Poor muscle tone often impacts chewing and swallowing. The person may push food out of the mouth; bite down forcefully on a metal utensil causing discomfort if not injury; or not be able to cough well enough to expel food or fluid that slips into the air pipe. Abnormal posture, combined with gravity, can make eating punishing. Pressure within the abdomen can rise; the normal opening in the diaphragm may be stretched; food (mixed with acid) may back up into the esophagus, causing damage. Constipation, bowel obstruction and impaction are common, and often exacerbated by years of taking laxatives, seizure and other medication.

Positioning and movement

One should seek advice from an individual's physician for any individual who needs help with positioning or mobility, so that ways of assisting are safe and effective. Typically, physical or occupational therapists are consults for plans regarding an individual's position or movement needs. If a person cannot change position on his/her own, someone must assist in repositioning. And, because the absence of movement can result in discomfort and skin breakdown, someone needs to watch for places on the skin that are red or warm to touch. These are warning signs of skin breakdown, and should be written down in the individual's record, and brought to the attention of the individual's physician.

Body mechanic principles

The North Dakota Center for Disabilities' staff training module on "Positioning, Turning and Transferring" (1995, pp. 60-62) recommends these basic principles:

1. **Do not lift loads heavier than those prescribed by your agency.**
   Prior to lifting or moving an object or person, test the weight of the load to make sure it can be moved safely. Get help or use an assistive device if necessary.

2. **Plan the move.**
   Do not move the object any further than is absolutely necessary. Arrange the surface to which the object is to be moved as close as possible to the surface from which it is to be transferred. Provide firm, stable surfaces and, if possible, transfer between surfaces of equal height.

3. **Use a wide, balanced stance with one foot ahead of the other.**
   The solid base of support reduces the likelihood of slipping and jerking movements. Keep your feet flat on the floor and spread them about the width of your shoulders. Place one foot in the direction toward which you will move. This foot position gives you a wider base of support and allows a weight shift from one foot while maintaining your stability.

4. **Keep the lower back in its normal, arched position while lifting.**
   Bend at the knees or hips. With the back arched, the forces are more evenly distributed on the support structures.

5. **Bring the load as close to the body as possible.**
   Throughout the move, keep your arms and the object or person as close to your body as possible. This keeps your back from acting as the fulcrum and reduces the stress.

6. **Keep the head and shoulders up as the lifting motion begins.**
   This helps to keep the arch in the lower back.

7. **Tighten the stomach muscles as the lift begins.**
   This shifts some of the weight of the load from the spine to the abdominal cavity.

8. **Lift with the legs and stand up in a smooth, even motion.**
   Using the large, strong muscles of the legs to straighten the knees and hips as the lift is completed decreases the lower back stress. Use your whole body when pushing, pulling, or lifting, not just your back and arms.

9. **Move the feet (pivot) if a direction change is necessary.**
   Throughout the move, your back, feet and trunk should all move together in the same direction, going to the same place. Avoid keeping your feet flat on the ground while twisting your body to move an object or person. When a turn is necessary, shift your feet and take small steps rather than twisting at the waist. Keep your feet pointed in the direction in which you are moving.

10. **Communicate if two or more individuals are involved in the movement.**
    This helps ensure the movement will be smooth, rather than sudden or jerking. It's a good idea to count 1,2,3...with the person helping.

11. **Don't lift when you can pull or push an object.**
    It's safer and easier that way.

12. **Teach and preach.**
    Help fellow employees use the rules of good body mechanics.

Some specific transfers and positioning guidelines

Individuals vary in size, muscle tone, and control of their bodies. They also have different needs with regard to help in moving about. Some people need help turning in bed. Some need help to sit up. Some need help in scooting forward or backward in a chair or bed. Some need help moving from bed to a chair, from a chair to the toilet, from a chair to bed, or from a chair (or bed) to the floor. Some need help walking from one place to another without falling. A plan (with whatever training is needed) should be devised for each person. Sometimes, a single helper can assist someone. Sometimes, two or more people may need to work together. Sometimes, mechanical aids (for example, lifting equipment) may be needed.

In general, helping people with positioning and transfers should attend to the following principles:

- Good planning;
- Asking the person how they want to be assisted;
- Encouraging as much participation as possible by the person being assisted;
- Using equipment (boards, sheets, lifts, etc.) when possible;
- Teaming up with another person when a two-person lift is needed; and
- Use of good body mechanics (good technique).

Wheelchair Safety

Wheelchairs are an example of adaptive equipment. Handrails, lifts, sliding seats (for example, into and out of the shower), and other devices are available to help with mobility and to reduce the risk of injury to both the person assisted and the person(s) assisting. The North Dakota staff training module, cited above, also lists the following guidelines for DSPs helping with wheelchairs (pp. 77-78):

- Self mobilization: Can the individual move themselves? If yes, encourage them to transport themselves as much as possible.
- Individual sitting position: Before starting check for the following:

  Are the individual's hips all the way back in the wheelchair?

  Does the seat belt need to be attached?

  Are footrests in place and are the person's feet on the footrests?

  Are the individual's hands on the armrests or in his or her lap away from the wheels?

- Brakes: Make sure that brakes are locked prior to assisting a person into or out of a wheelchair.
- Holding on: Grasp both push handles on the wheel chair firmly.
- Starting and stopping: Always start and stop slowly, take corners slowly, and maintain a steady pace while moving. This is to avoid jostling the person or throwing him/her off balance.
- Surface levels: Be alert for changes in surface levels—for example, doorjambs or the floor of an elevator. Hitting a half inch rise at standard wheelchair speed can bend the front casters and pitch the person forward.
- Opening doors: Never open doors by pushing with the front of the wheelchair. This can damage the wheelchair's footrests, the person's feet, or the door. Stop the wheelchair, open the door by hand, and bring the wheelchair through. If the door does not stay open on its own, hold it with on hand or your backside. Do not let the door bang the side of the wheelchair.

- Inclines and ramps: The person's weight should always be pushing back toward you on inclines and ramps. Going uphill means pushing the person; to go downhill, turn the chair around and walk backwards. In this manner, the person's weight will be pushing back toward you.

- Outdoor surfaces: Be alert for anything that can trap front casters or cause the wheelchair to tilt, such as holes, cracks, stones, sand, or soft shoulders.

- Curbs: Up curbs—Stop at the curb, raise the front casters by pressing down on the foot lever, roll the front casters onto the sidewalk, and roll the large wheels over the curb by lifting slightly on the push handles as you push forward. Down curbs—Always come down curbs facing backwards with the large wheels coming first. Maintain some upward pressure on the push handles as you pull the wheelchair toward you.

Back Exercises for You As a DSP

In addition to using proper techniques for lifting and moving people and objects, the DSP may be able to help him/herself by doing exercises to strengthen the back. However, be sure to check with your physician or other health care professional before starting the exercises shown in Figure 6.

Figure 6
Exercises to Prevent Back Problems

From *Kaiser Permanente Healthwise Handbook*

Strengthening your entire body prevents future back problems and also improves your general health. Many exercises and sports strengthen your arms and legs. Doing special exercises to strengthen your abdominal muscles is also encouraged.

Keeping your body flexible helps you to use proper body mechanics that protect your back.

These exercises are not recommended for use during an acute back problem or spasm.

- If any exercise causes increased or continuing back pain, stop the exercise and try something else. Stop any exercise that causes the pain to radiate away from your spine into your buttocks or legs, either during or after the exercise.
- You do not need to do every exercise. Stick with the ones that help you most.
- Start with five repetitions three to four times a day, and gradually increase to 10 repetitions. Do all exercises slowly.

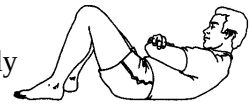
The basic types of exercises that can help your back include: flexion, extension, and stretching and strengthening.

Flexion Exercises
Flexion exercises stretch the low back muscles and strengthen the stomach muscles.

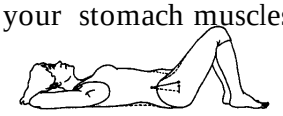
Curl-Ups
Curl-ups strengthen your abdominal muscles, which work with your back muscles to support your spine.

- Lie on your back with knees bent (60' angle) and feet flat on the floor, arms crossed on your chest. Do not hook your feet under anything.
- Slowly curl your head and shoulders a few inches up until your shoulder blades barely rise from the floor. Keep your low back pressed to the floor. To avoid neck problems, remember to lift your shoulders and do not force your head up or forward. Hold for 5 to 10 seconds (do not hold your breath), then curl down very slowly.

Pelvic Tilts
This exercise gently moves the spine and stretches the low back.



- Lie on your back with knees bent and feet flat on the floor.
- Slowly tighten your stomach muscles

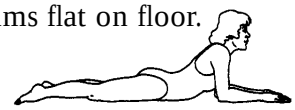


and press your low back against the floor. Hold for 10 seconds (do not hold your breath). Slowly relax.

Extension Exercises
Extension exercises strengthen your low back muscles.

Press-Ups
Begin and end every set of exercises with a few press-ups (see illustration).

- Lie face down with hands at shoulders, palms flat on floor.



- Prop yourself up on your elbows, keeping lower half of body relaxed. If it's comfortable, press your chest forward.
- Keep hips pressed to the floor. Feel the stretch in your low back.
- Lower upper body to the floor. Repeat 3 to 10 times, slowly.

Backward Bend
Practice the backward bend at least once a day, and do it frequently when working in a bentforward position.

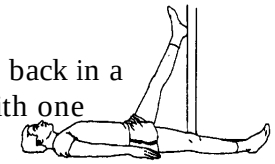
- Stand upright with your feet slightly apart. Back up to a counter top for greater support and stability.
- Place your hands in the small of your back and gently bend backward. Keep your knees straight (not locked) and bend only at the waist.
- Hold the backward stretch for one to two seconds.

Strengthening and Stretching Exercises

Prone Buttocks Squeeze
This exercise strengthens the buttocks muscles, which support the back and aid in lifting with the legs.

- Lie flat on your stomach with your arms at your sides.
- Slowly tighten your buttocks muscles. Hold for 5 to 10 seconds (do not hold your breath). Slowly relax.
- You may need to place a small pillow under your stomach for comfort.

Hamstring Stretch
This stretches the muscles in the back of your thigh that allow you to bend your legs while keeping a natural curve in your back (see illustration).



- Lie on your back in a doorway with one leg through the doorway on the floor and the leg you want to stretch straight up with the heel resting on the wall next to the doorway.
- Keep the leg straight and slowly move your heel up the wall until you feel a gentle pull in the back of your thigh. Do not overstretch.
- Relax in that position for 30 seconds, then bend the knee to relieve the stretch. Repeat with the other leg.

Hip Flexor Stretch
This stretches the muscles in the front of your hip, which avoids "swayback" caused by tight hip muscles.

- Kneel on one knee with your other leg bent and foot in front of you. Keep a natural curve in your back.
- Slowly shift your weight onto your front foot, maintaining a natural curve in your back. Hold for 10 seconds. You should feel a stretch in the groin of the leg you are kneeling on. Repeat with the other leg.

Information Brief

Environmental Emergencies

Some disasters are "internal," as when a fire occurs within the home. Others are "external," as when an earthquake, flood, tornado, toxic spill, or other event outside the home interferes with power, water, food supplies, or other essential services. Some "external" disasters trigger "internal" ones as well, as when a flood damages a home, or an earthquake triggers a fire. Regardless of the nature of the disaster, four matters are central to what needs to be done:

- Are there injuries that require first aid and medical attention?
- Does the home have to be evacuated, or is it safe to occupy?
- Are there sources of food and water?
- Has the disaster interfered with public utilities, such as gas, electricity, and communications?

Fires and Fire Drills

Preparation, planning

Residential sprinkler systems are the *best way* to control fires. Such systems will suppress 9 out of 10 fires. Smoke detectors wired into an alarm system are important. If the detectors are battery-operated, they should be checked monthly and replaced at least yearly (say, on the administrator's birthday).

Community Care Facilities are required to have fire drills regularly, with documentation of the results. In preparation for drills, or in addition to drills, a lot of valuable teaching and learning is possible. Here are some things to teach individuals living in your home:

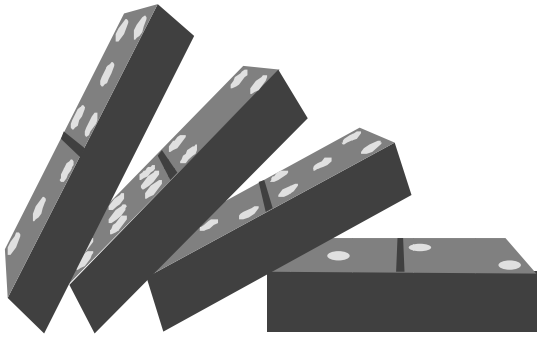
- Reacting to an alarm, by exiting along a path that avoids the fire.
- *Remaining calm* and walking (or crawling) out of the house.
- Once outside the house, going to an agreed-upon rendezvous point (for example, edge of the street in front of the neighbor's house), in order to be accounted for.

Homes should have fire escape plans for both drills and the real thing. Here are some things that belong in the plan:

- ✓ Floor plans, showing escape routes.
- ✓ Making sure fire exits open easily and are free of clutter.
- ✓ The rendezvous point is outside the home and away from danger.
- ✓ Roles and responsibilities of DSPs and residents.
- ✓ Location of multi-purpose, labeled (ABC) fire extinguishers. – Fire extinguishers have a role if a fire is small and can be readily contained, but the order in which actions are

taken should accord with ***RACE,*** as explained below.

One can then teach (and reinforce) behaviors consistent with the plan. It is a good idea to blockade principal exits from the house, regularly, so that people remain aware of various routes to the outside. Drills should be scheduled to cover various shifts, and some should be when individuals and staff are inconvenienced (in bed, taking a shower).



Responding to the real thing

Community Care Facilities should get acquainted and use the prevention services of their Fire Departments. Plans should be checked out with such officials, and revised according to recommendations made by these fire prevention experts. In general, if you smell smoke or discover a fire in your home, you should do the following in the order outlined:

RACE

Rescue	Rescue the resident and anyone else in immediate danger.
Alert	Alert the fire department by calling **911** from a phone out of harms way.
Contain	Contain the fire by closing doors between you and the fire.
Extinguish	Extinguish the fire if it is small and easy to contain; *or* otherwise,
Evacuate	Evacuate (leave) the building immediately.

External Disasters and Mass Casualties

External disasters which include floods, earthquakes, high winds, toxic spills, even the "Y2K problem," and the like typically disrupt travel, communications, and basic utilities (such as gas, water, and electricity),

and put an intense strain on emergency services, including medical care.

Preparation

Here is a list of survival items (in addition to fire extinguisher and smoke detectors) that every home should have:

For the household

- A battery-powered radio, flashlight and plenty of extra batteries;
- First aid kit and first aid book;
- Adjustable wrench for turning off gas and water;
- Bottled water sufficient for the number of members in the household (1 gal. per person per day);
- A one-week food supply of canned and dried foods for each household member. (NOTE: These should be replaced regularly: water every six months, and canned goods once a year. These containers should, of course, be dated.)
- Non-electric can opener;
- Portable stove such as butane or charcoal;
- Matches (NOTE: Do not light matches, if any smell of gas.);
- Credit cards and cash;
- An extra set of keys; and
- A current posted Disaster Plan, with information about relocation, Poison Control, physician names and telephone numbers, etc.

For each resident of the home

- List of current medications being taken and prescribing physician;
- Currently prescribed medications on hand;
- Emergency information (for example, name; DOB; home address; phone number; name address and phone number of administrator; Medi-Cal or other medical insurance numbers; known allergies and food sensitivities; name address and phone numbers of nearest relatives or closest friends);
- Medi-Cal or other insurance card;
- Signed consent-to-treatment form, with phone number of the regional center or other placement agency;
- Other personal and health-related information in a readily accessible form;
- A change of clothing, rain gear and sturdy shoes;
- Blankets or sleeping bag;
- Any needed adaptive equipment or assistive device (for example, wheelchair; extra pair of glasses).

Basic things you need to know

In responding appropriately to an external disaster, you need to know:

1. How to turn off gas, water, and electricity;

2. First Aid; and

3. Where each person went (if unsafe to stay at home, or medical care is needed), so that the household can be reunited quickly.

Responding to an external disaster

The nature of an external disaster dictates how best to respond at the time. It is always advisable to *stay calm.* Then, if an earthquake hits, the best way to respond depends on where you are at the time. If inside a building, stay away from windows; stand in a doorway; or crouch under a sturdy desk or table. If outside, stand away from buildings, trees, telephone and electrical lines. If in a car, drive away from underpasses or overpasses; stop in a safe area; and stay in the car.

After an earthquake, one should:

✓ Check for injuries and provide any needed first aid;

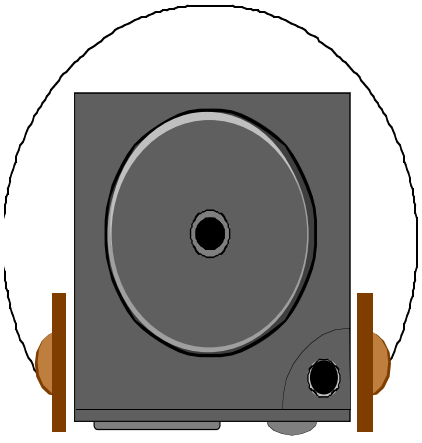
✓ Wear shoes;

✓ Check for gas, water, electrical or other breaks. Turn off utilities where danger exists (for example, smell of gas – turn off gas near meter). Check for building damage (for example, around chimneys and foundations);

✓ Clean up dangerous spills (glass; water);

✓ Turn on your radio and listen for instructions; and

✓ Do not use the telephone to make local calls, except for emergencies.



Activity:
Disaster Planning and Response

DIRECTIONS: At your table, agree on a particular type of disaster, other than an earthquake, to discuss: flood; fire; tornado; toxic spill in the neighborhood; Y2K; or something else.

1. **What would be a "worst case" scenario for you and the home where you work?**

2. **What steps could you take to be better prepared?**

3. **What would you do if the disaster were to occur?**

Answers to In-Class Review

1. What is good nutrition and why is it important?

Getting the right number of calories; eating a variety of nutritious foods; getting the vitamins and minerals needed; eating the right number of servings from the five food groups; avoiding too much fat (particularly saturated), salt and cholesterol in the diet.

2. What changes can most Americans make in their drinking and eating habits to improve their health and well-being?

Drink at least eight 8-ounce glasses of water each day, more if you drink caffeinated beverages because they are dehydrating. Eat less salt, simple sugars, and fat; eat more fiber; more fruits and vegetables; more complex carbohydrates.

3. What is the proper way to handle, prepare, and store food?

Carefully! It should go directly from store to home, and be stored properly (shelves, refrigerator, freezer) until used. Preparation should be under sanitary conditions (washed hands, surfaces, etc.). Meat and poultry should be cooked at 165 (internal temperature) degrees F. or higher and long enough to kill bacteria. Poaching, steaming, roasting, boiling and broiling (for short periods) is better than frying. Wok cooking is fine. Cooked food should not be left out long. All leftovers should be discarded, or covered, refrigerated, labeled and dated.

4. What are some of the positive effects of movement and physical activity?

Movement and physical activity can help: relieve tension and stress; provide enjoyment and fun; stimulates the mind; help maintain stable weight; control appetite; boosts self-image; improve muscle tone and strength; improves flexibility; lower blood pressure; relieve insomnia; increase “good” cholesterol (HDL); and prevent diabetes.

5. How are infections spread, and what can you do to limit their spread?

Germs (bacteria, viruses, etc.) are spread in droplets in the air; from one person to another; and from another place (for example, fly; cutting board; etc.) to a person. Natural defenses include our skin, organs of elimination, our immune systems, and the like. Immunizations help. Gloves help. Colds, flu, and more serious diseases can be spread through coughing, sneezing, not washing after going to the toilet, etc., and by the things we touch afterwards. Germs enter through our mouths, eyes, nose, and mucous membranes. That is why hand-washing is so important.

6. Can you describe at least three principles of good body mechanics when lifting things?

Push, don't pull. Move (for example, a ladder), don't reach. Squat, don't bend, using your legs not your back and arms. Turn, don't twist, when changing direction. Plan the move. Hold the item close to your own body. Ask for assistance!

7. Why is preparation, planning, and practice important in dealing with possible environmental emergencies (for example, fires, earthquakes)?

Preparation means having what you need (for example, smoke detectors; fire extinguishers; battery-powered flashlight and radio with lots of extra batteries; emergency food supply; insurance cards and basic health records for each person; etc.). Planning means deciding, in advance, what to do (for example, to gather outside the home at a particular rendezvous site). Practice improves our skill in handling potential emergencies (for example, learning to respond to alarms, by leaving the house).

If You Want to Read More About
Wellness (Safety, Nutrition and Exercise)

Shopping on the Internet
Experts believe that within ten years, 15% of groceries will be sold through the internet. NetGrocer (www.netgrocer.com) allows shopping for nonperishables by computer, with FedEx delivery within two to four business days. This is a shipping charge, but the price of food items is less than at food stores.

The American Dietetic Association's Complete Food and Nutrition Guide
by Roberta Larson Duyff (1998); Chronimed Publishers; ISBN: 1565611608

Named a top health book by *Ladies Home Journal,* The American Dietetic Association's *Complete Food & Nutrition Guide* teaches how to combine "good taste and good health" in every meal and snack. No matter how nutritionally impaired you think you are, you'll find clear, understandable information on the basics of metabolism and weight management, vegetarianism, nutrition for athletes, food allergies, and more. (Source: Amazon.com Review)

Eating for Good Health
by Reader's Digest (1995); Reader's Digest Association; ISBN: 0895778327

This short, beautifully illustrated book, is packed with useful information for anyone eager to learn more about the connection between food and health.

The Food Shopping Counter
by Annette B. Natow and Jo-Ann Heslin (1999); Pocket Books revised edition; ISBN: 0671004522

This book, one of a series, has calorie, fat, sodium, carbohydrate, and fiber values for more than 20,000 items, both generic and brand names, organized into more than 350 categories.

Fast Food Restaurant Nutrition Counter

by Dr. Art Ulene (1996); Avery Publishing Group; ISBN: 0895296667

This book has over 3,000 restaurant chain food items listed, in terms of serving size, total calories, protein, carbohydrates, sodium, fiber, total fat, saturated fat, and cholesterol. Art Ulene, M.D., received is medical degree from UCLA School of Medicine, and has appeared nationally on TV programs, such as NBC's Today Show. He is the author of more than forty books and home video/audio programs.

Disaster Preparedness for People with Disabilities

by American Red Cross Disaster Services (1996); Author; ISBN: None.

This is a self-instructional manual for people with disabilities. It contains a number of exercises and checklists. It includes a number of considerations (for example, protecting one's assistance dog) not found in more generic guides.

Poison! How to Handle the Hazardous Substances in Your Home

by Jim Morelli (1997); Andrews and McMeel; ISBN: 083622721 (pbk.)

The back cover begins: "You live in a toxic dump. There's no getting around it. If you wash dishes, do laundry, or clean the toilet, oven, or sink, chances are good that you use a poisonous material to do it." Morelli worked in a Poison Control Center, and thus has first-hand knowledge of the kinds of work involved.

Hazards at Home

by Bill Gutman (1996); Twenty-First Century Books; ISBN: 0805041419

This book deals with falls, fires and burns, poisons, firearms, swimming pools and other drowning dangers, tools and machinery, and how to help if there is an accident.

Homework Assignment for Session #4: Over-the-Counter Medication in the Home

Directions: Your homework assignment is to check around either the home where you work or your own home, and to record some information about non-prescription, Over-the-Counter medications: things like aspirin, Tylenol, Nyquil, anti-diarrhea medicine, heartburn medications, and the like.

1. **What kinds of over-the-counter medications (for example, pain; inflammation; heartburn; cold/flu symptoms) – that is, non-prescription medications -- are in the home?**

2. **How many over-the-counter containers (for example, packages; bottles) were you able to find?**

3. **How many have expiration dates in the past?**

4. **How many are under lock and key, accessible only to someone who has a key?**